

Work Order ID 77728

77728

Page 1

Monday, December 19, 2011 11:13:27 AM

Item ID: D350-636-011

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube LH

Start Date: 12/19/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/10/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date: 11-12-19

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2750

F

D3492

C

0.00

100

100

DC

Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

Sizelby

JJ Per MLT 12-1-11
①

77728.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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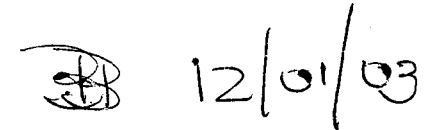
Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.								
	4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting								
	5- Drill only two fwd step holes using DT9616. Ensure proper positioning.								
	6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)								
	7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***								
	8-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)								
	9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	10-Open up holes of Detail A to 0.297" (total of 2 holes per side)								



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Page 3

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Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Weld D2744 Cap as per Dwg D2750 and QSI 004.Fill grooves in bend left
from bending as per QSI 004

A/R Aluminum Rod batch: *07119712*

BE12-01-03

12-Grind welds flush as per Dwg D2750

B 12/01/04

120

QC10- Inspect visual per QSI004- ground welds

0.00

120

QC

Memo

0.00

8/21/04

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

8/21/04

Quality Control

W/O:		WORK ORDER CHANGES					
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Page 4

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 Start Date: 12/19/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 1/10/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									

Ac 12.01.04

1 0 BE 12-01-04

W/O:		WORK ORDER CHANGES					
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Page 5

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Required Date: 1/10/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750.								
	3- Open float hole to 0.500" (4 per side)								
	4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8)								
	5-Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>119508</u> exp. date: <u>12/08/13</u>								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: <u>M119712</u>								
	9- At section AJ-AJ drill out x-bolt spacer to 0.404"								
	10-Grind welds flush as per Dwg D2750								

BE 12-01-05

12/01/05

BE 12-01-05
12/01/06

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 6

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Start Date: 12/19/2011 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/10/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

12-Deburr holes

170

QC10- Inspect visual per QS1004- ground welds 0.00

170

QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O 0.00

180

QC

Memo

0.00

Quality Control

> JB 12/01/06

S 12/01/09

S 12/01/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 7

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Cust Item ID:

Required Date: 1/10/2012 Req'd Qty: 1.00 ***1***

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Reference:

Run Start ***NR1***

Stop ***NR2***

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

Pressure Wash per QSI005 4.3

0.00

190

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

12.01.09 (1)

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Powder Coating

Memo

0.00

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

9-10 3200F
9-40

1X m-f 12/01/10

210

QC3- Inspect Part Finish

0.00

210

QC

Quality Control

Memo

0.00

Inspect for foreign object per QSI 024

1 BR 12-1-10.

m119480

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 8

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Required Date: 1/10/2012 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220		0.00							
220	HandFinishing					1	BR	12-1-10	
HandFinish	Memo	0.00							
Hand Finishing	1- Install inserts as per Dwg D2750								
230		0.00							
230	HandFinishing					1	BR	12-1-10	
HandFinish	Memo	0.00							
Hand Finishing	1-Inspect for Foreign Objects								
	2-Spray inside of tube with "LPS-3" batch: <u>N/A</u>								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750								
	SIKA FLEX 241								
	BATCH: <u>119508</u>								
	EXP DATE: <u>12-8</u>								
	4-assemble o'ring to plug as per dwg D3497 and apply o'ring lube								
	A/R 55-o'ring lube batch: <u>110848</u>								
	5-Coat all exposed fasteners with "LPS Procyon" batch: <u>114596</u>								

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Page 9

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	QC5- Inspect part completeness to step on W/O	0.00							
240									
QC	Memo	0.00							
Quality Control									
250	Pick Kit	0.00							
250									
Packaging	Memo	0.00							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
260									
QC	Memo	0.00							
Quality Control	*****ensure antiseize is on AN8C21A bolts*****								

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Page 10

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
270									
Packaging	Memo	0.00							
Packaging	Package as per PPP D350-636-011								
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

W/O:		WORK ORDER CHANGES					
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Picklist Print

Monday, December 19, 2011 11:13:39 AM

Page 1

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D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-23 As per Rev D JLM
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
 DD verf:EC IPP Rev:P 10.06.22 revise
 seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH
 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3492-1		Manufactured	No			230	Each	110.0000	8	8			
D3492-1									**				
Plug													

**D3492-011*

Location	Loc Qty	Loc Code
FP002	70185	
69531	8	
74444	2	
76235	100	

8.

BR 12-1-10.

D3492-3		Manufactured	No			230	Each	61.0000	8	8			
D3492-3									**				
Plug													

Location	Loc Qty	Loc Code
FP002	61	
74447	17	
74871	44	

8

BR 12-1-10.

Dart Aerospace Ltd

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Page 2

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Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

135.0000

8

8

NAS1611-010

O-RING

**

132 12-1-10.

Location

Loc Qty

Loc Code

FP001

12021

135

110915

14

117460

8

118077

1

118612

3

119438

59

119623

50

NAS1149D0863J

Purchased

No

250

Each

173.0000

2

2

NAS1149D0863.I

WASHER

**

Location

Loc Qty

Loc Code

ST298

173

118078

73

119307

100

D2744

Manufactured

No

110

Each

34.0000

1

1

D2744

Cap

**

AE 12-01-03

Location

Loc Qty

Loc Code

LG002

34

62715

1

70881

12

71861

21

Monday, December 19, 2011 11:13:39 AM

Shop Packet Print

Page 2

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Page 3

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Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

26.0000

1

D2600-3-BENT

Extrusion Bent

**

1 B 12/01/03

Location

Loc Qty

Loc Code

LG

26

66875

7

73253

1

75021

1

75022

1

75023

1

77623

15

D2743

Manufactured No

160

Each

177.0000

8

D2743

Crossbolt Spacer

**

8 8 BR12-01-05

Location

Loc Qty

Loc Code

LG001

177

67766

4

68251

3

73403

64

74445

100

76141

6

D2739

Manufactured No

160

Each

4.0000

1

D2739

350 I Beam

**

1 B 12/01/04

Location

Loc Qty

Loc Code

LG

4

72155

1

76987

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 4

Monday, December 19, 2011 11:13:39 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-3 Manufactured No 160 Each 26.0000 4 4

D3490-3

Cross Bolt Spacer

**

BE 12-01-05

Location Loc Qty Loc Code

LG001 26

74877 26

4

D3490-1 Manufactured No 160 Each 34.0000 4 4

D3490-1

Cross Bolt Spacer

**

BE 12-01-05

Location Loc Qty Loc Code

LG001 34

62450 2

67773 4

74875 28

4

ALS4-1032-225 Purchased No 220 Each 1,374.000 38 38

ALS4-1032-225

Insert

**

BL 12-1-10.

Location Loc Qty Loc Code

ST281 1374

108696 199

110768 62

118386 ✓ 858

118966 255

38

D3793-3 Manufactured No 230 Each 18.0000 1 1

D3793-3

Wearshoe

**

BL 12-1-10.

Location Loc Qty Loc Code

FP001 18

74528 ✓ 5

74593 1

75043 12

1

Monday, December 19, 2011 11:13:39 AM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

Monday, December 19, 2011 11:13:39 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

87.0000

1

1

AN8C35A

BOLT

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP002

86

115960

1

117834 ✓

29

118286

56

ST346

1

114442

0

115188

0

115960

1

D3793-1

Manufactured

No

230

Each

14.0000

1

1

D3793-1

Wearshoe

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP001

14

74591

2

750386 ✓

12

D3488-041

Manufactured

No

230

Each

17.0000

1

1

D3488-041

Blade Fitting Assembly, LH

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP002

17

61689

1

67788

1

69903 ✓

4

71887

2

75056

9

Monday, December 19, 2011 11:13:39 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, December 19, 2011 11:13:39 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3794-3 Manufactured No

230

Each

17.0000

1

1

D3794-3

Gasket

**

BL 12-1-10

Location

Loc Qty

Loc Code

FP002

17

74530

3

74596 ✓

14

AN6C44A

Purchased No

230

Each

59.0000

4

4

AN6C44A

BOLT

**

BL 12-1-10

Location

Loc Qty

Loc Code

FG

2

103964

2

ST343

57

118985

27

119125 ✓

30

MS21083C8

Purchased No

230

Each

60.0000

1

1

MS21083C8

NUT

**

BL 12-1-10

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

59

115884

0

118077

1

118614 ✓

17

119309

2

119436

25

119638

14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Picklist Print

Page 7

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-25 Manufactured No

230

Each

23.0000

1

1

D3536-25

Gasket

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP002

23

75039 ✓

23

1

D3631-1 Manufactured No

230

Each

399.0000

8

8

D3631-1

Washer

**

BR 12-1-10.

Location

Loc Qty

Loc Code

ST072

399

68062

2

75548 ✓

397

8

D3791-1 Manufactured No

230

Each

25.0000

1

1

D3791-1

Wearplate

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP002

25

62239

2

74598 ✓

7

75041

16

1

AN960C10L ~~★~~ NAS1149C0332 ✓ Purchased No

230

Each

0.0000

38

38

***AN960C10I ***

washer

**

38. BR 12-1-10.

119736-

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

D2745

Manufactured No

230

Each

37.0000

8

8

D2745

Bushing

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP001

76142

37

69529

1

74446

36

8

AN3C5A

Purchased No

230

Each

1,054.000

34

34

AN3C5A

Bolt

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP001

7

115835

7

ST350

1047

116419

28

117343

17

117764

49

117872

2

119127

500

119749 ✓

451

34

D3537-1

Manufactured No

230

Each

68.0000

3

3

D3537-1

Wearpad

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP002

77036

68

69817

5

74867

63

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 9

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0832R

Purchased

No

230

Each

326.0000

1

1

NAS1149C0832R

WASHER

**

BR 12-1-10.

Location

Loc Qty

Loc Code

ST297

326

114915 ✓

326

1

AN3C6A

Purchased

No

230

Each

266.0000

4

4

AN3C6A

BOLT

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

265

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

21

119449

100

119749 ✓

89

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 10

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

128.0000

8

8

NAS1611-013

O-RING

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP001

128

116582

5

117291

2

117887

53

119307

24

119438

2

119623

42

8

8

D3535-25

Manufactured

No

230

Each

21.0000

1

1

D3535-25

Wearshoe

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP001

21

62233

1

74592

8

75040

12

1

D3794-1

Manufactured

No

230

Each

35.0000

1

1

D3794-1

Gasket

**

BR 12-1-10

Location

Loc Qty

Loc Code

FP002

35

74594

7

75042

28

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Picklist Print

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

MS21043-6

Purchased

No

230

Each

401.0000

4

4

MS21043-6

NUT

**

BR 12-1-10.

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

381

112314 ✓

171

117887

10

118384

200

Manufactured

No

250

Each

29.0000

2

2

D3493-1

D3493-1

Washer

**

Location

Loc Qty

Loc Code

ST062

29

70697

2

71846

1

76237

26

Purchased

No

250

Each

60.0000

2

2

MS21083C8

MS21083C8

NUT

**

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

59

115884

0

118077

1

118614

17

119309

2

119436

25

119638

14

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

Page 12

Monday, December 19, 2011 11:13:40 AM

Work Order ID: 77728

77728

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 12/19/2011

Required Date: 1/10/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

43.0000

2

2

**

AN8C21A

BOLT

Location

Loc Qty

Loc Code

ST343

43

118758

13

119530

30

NAS1515H3L

Purchased

No

230

Each

107.0000

4

4

**

***NAS1515H3I ***

WASHER

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

67

118686

3

119438 ✓

64

D2741

Manufactured

No

250

Each

21.0000

1

1

**

D2741

Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST

-8

71856

2

ST466

29

71856

19

D3532-1

Manufactured

No

250

Each

30.0000

2

2

**

D3532-1

Spacer

Location

Loc Qty

Loc Code

ST065

30

74880

30

Monday, December 19, 2011 11:13:40 AM

Shop Packet Print

Page 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL Δ
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL Δ

SHOP COPY
UNCONTROLLED COPY
SUBJECT TO
WORK COPY
NO. 7777-8
11-12-19

RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	PA	DART AEROSPACE USA, INC.	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 1 OF 11
APPROVED	PA	TITLE	SCALE
DE APPR.	PA	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

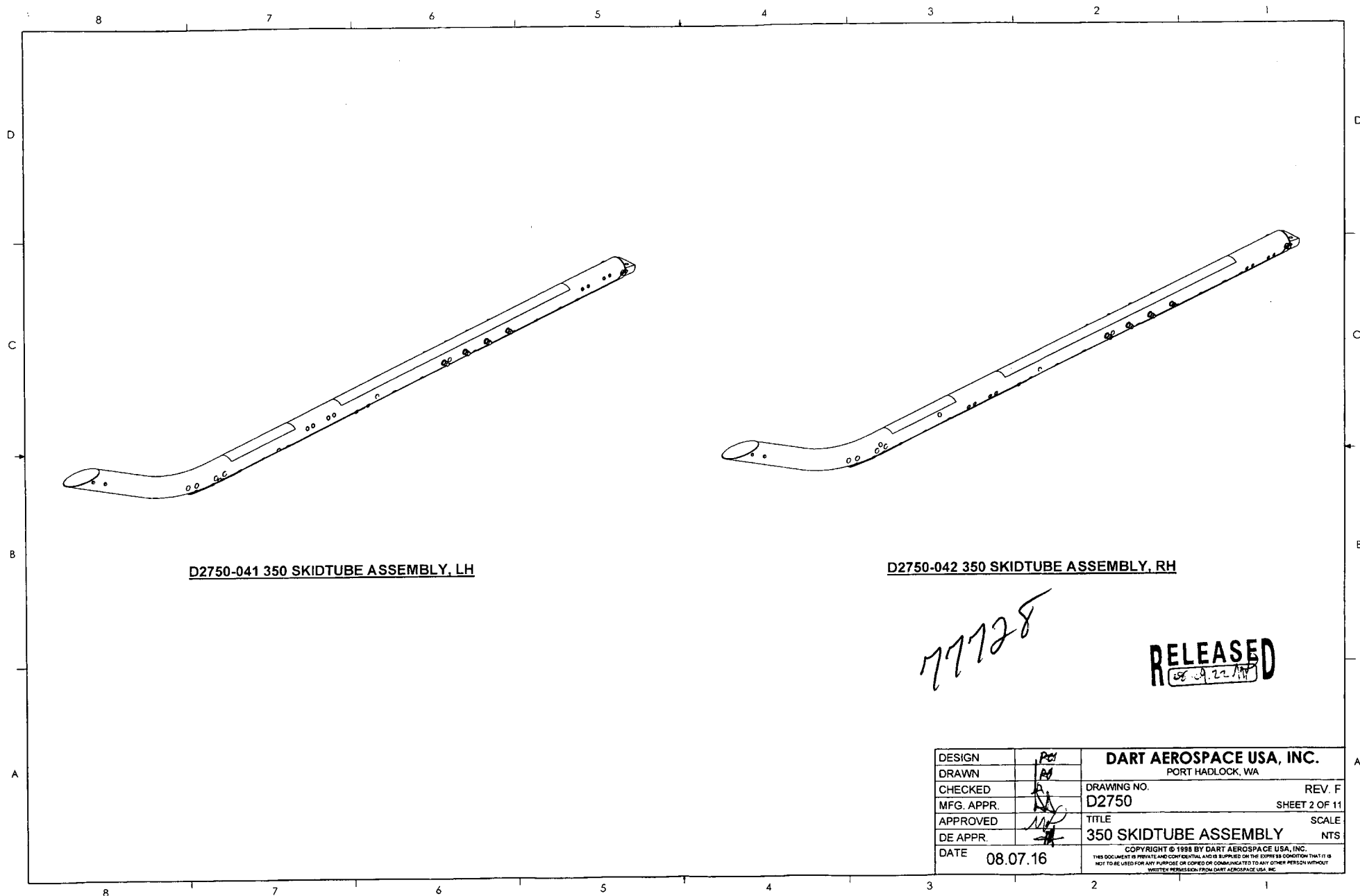
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



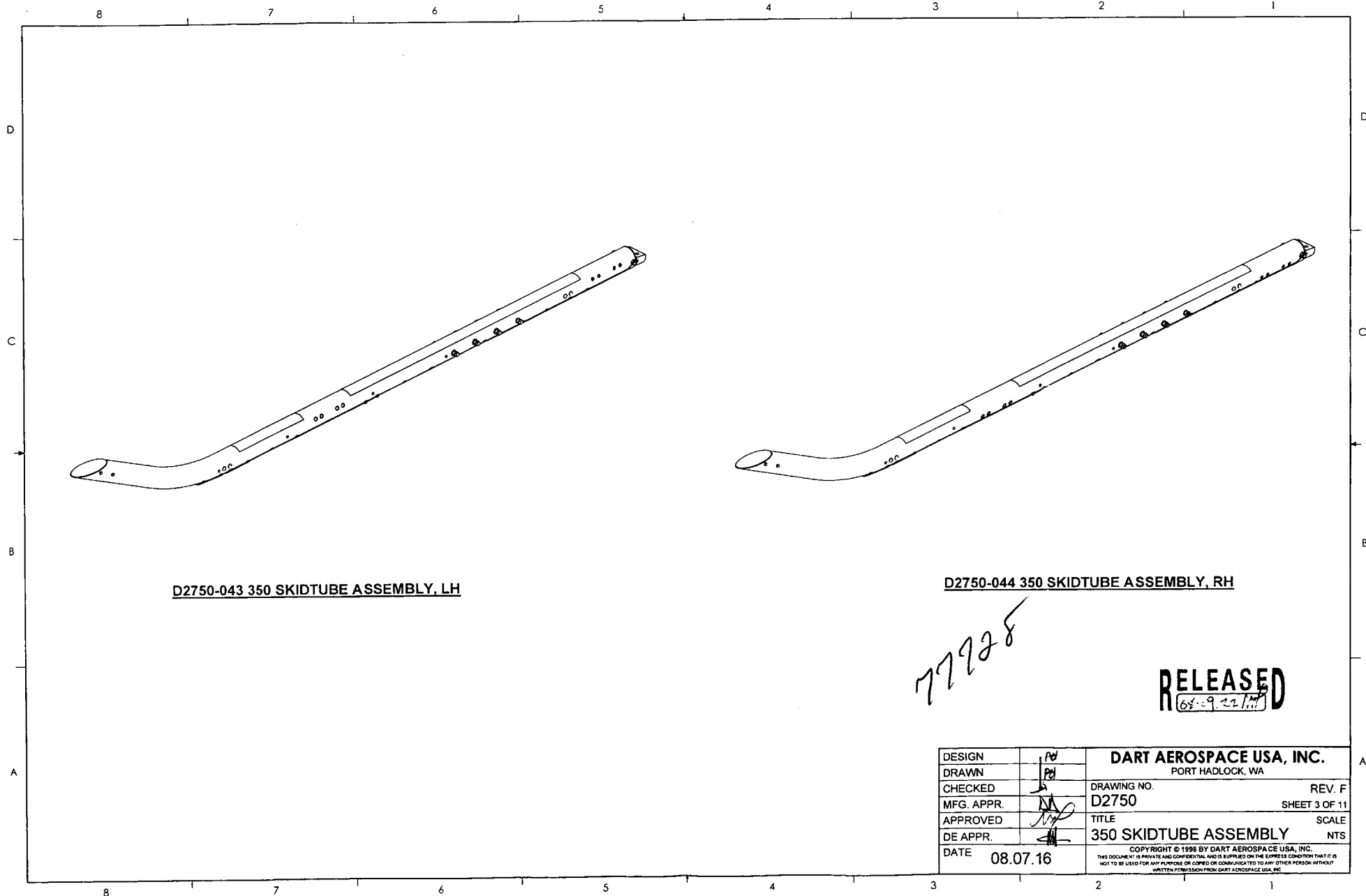
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



77728

RELEASED
68-9-22/111

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED	MA	DRAWING NO.	REV. F
MFG. APPR.	MA	D2750	SHEET 3 OF 11
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	350 SKIDTUBE ASSEMBLY	NTS
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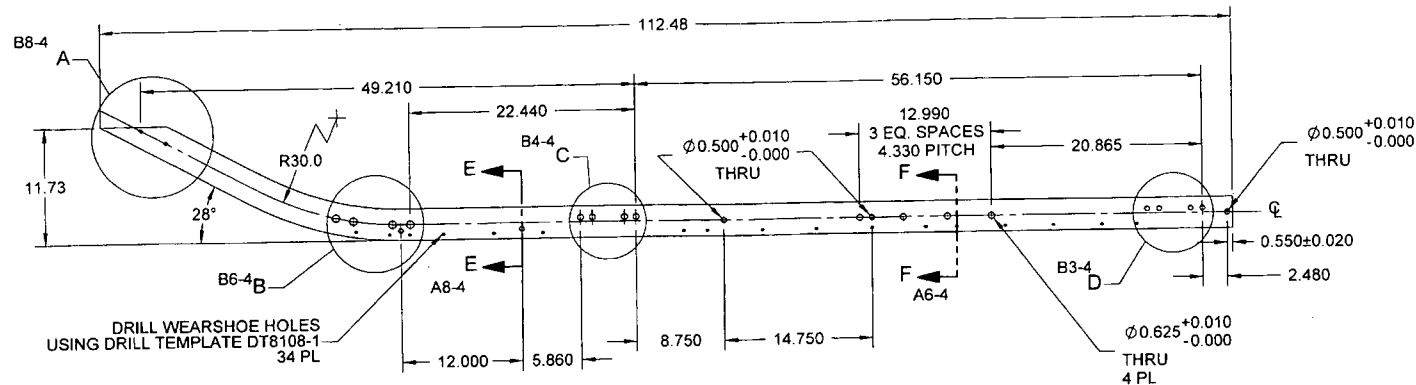
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

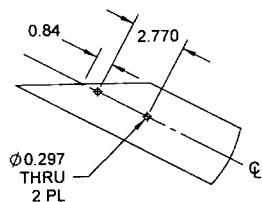
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

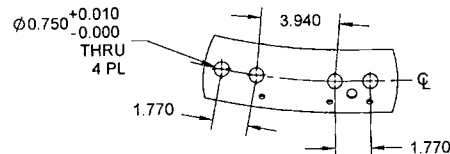
NOTE: Date & initial all entries



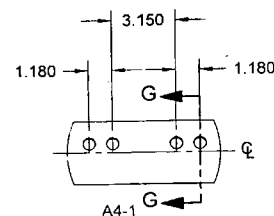
D2750-1 LH SKIDTUBE



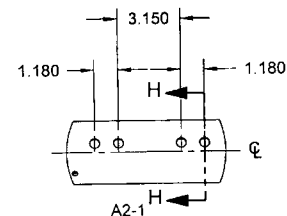
DETAIL A
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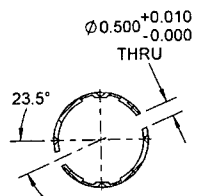
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SCALE 2X



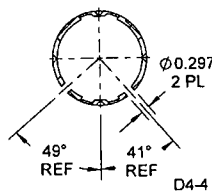
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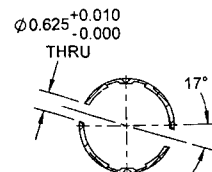
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SCALE 2X



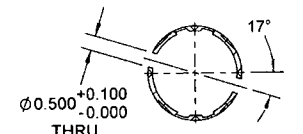
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

DESIGN	IPB
DRAWN	IPB
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	08.07.16

DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWING NO. D2750	REV. F
TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
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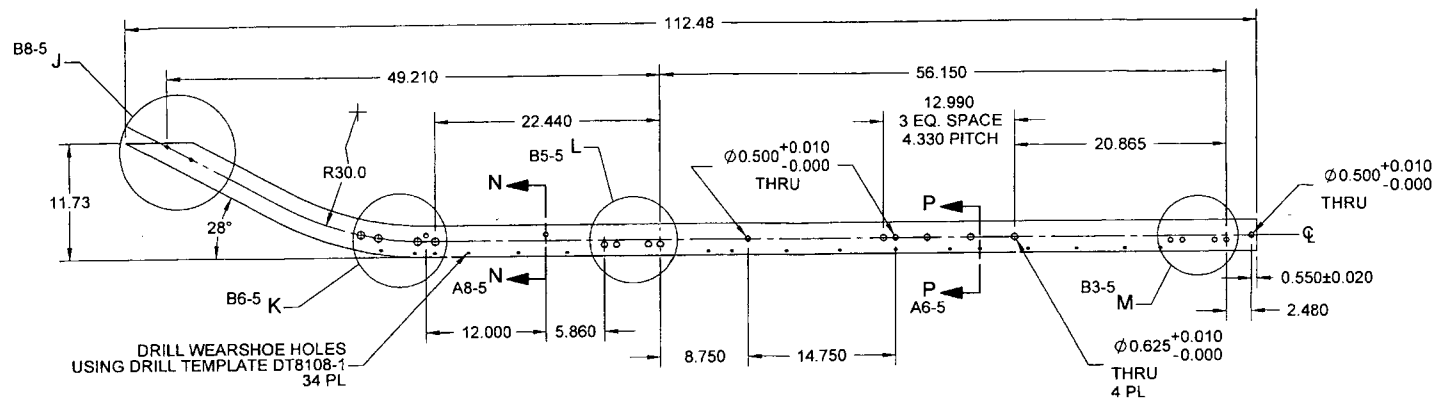
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

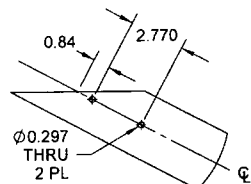
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

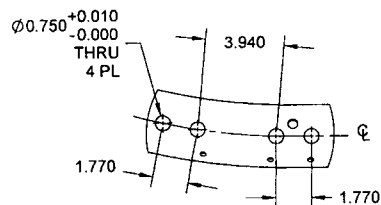
NOTE: Date & initial all entries



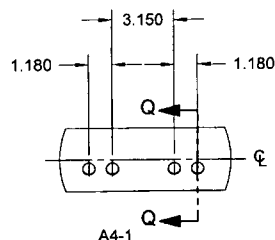
D2750-2 RH SKIDTUBE



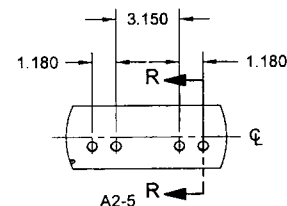
DETAIL J
SCALE 2X



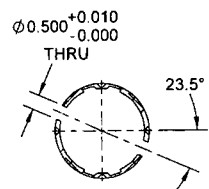
DETAIL K
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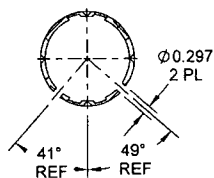
DETAIL L
SCALE 2X



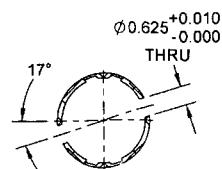
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SCALE 2X



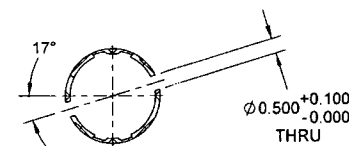
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

DESIGN	REV	DART AEROSPACE USA, INC.	
DRAWN	REV	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 5 OF 11
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

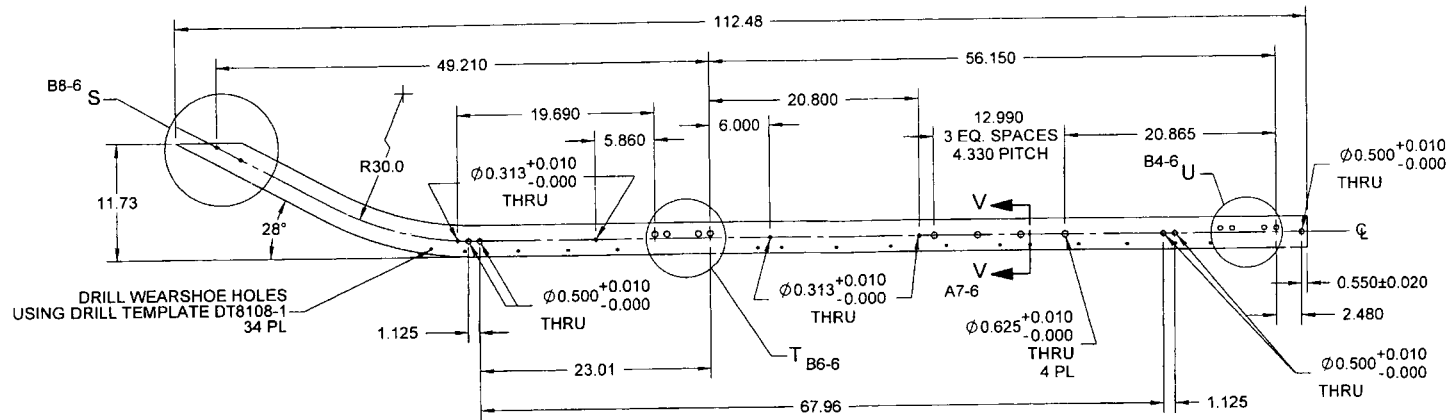
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

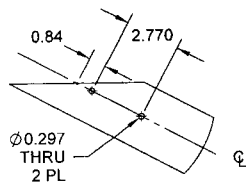
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

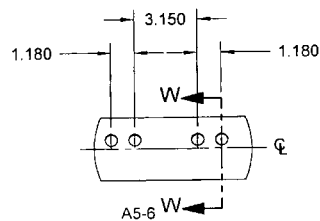
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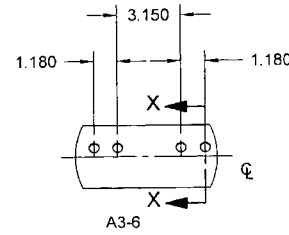
D2750-3 LH SKIDTUBE



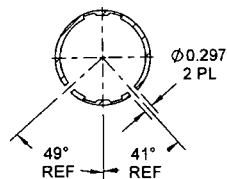
DETAIL S
D8-6
SCALE 2X



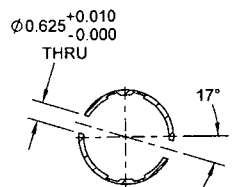
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C5-6
SCALE 2X



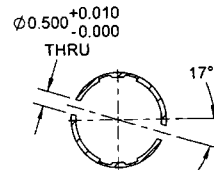
DETAIL U
D3-6
SCALE 2X



SECTION V-V
C4-6
SCALE 3X, 17 PL



SECTION W-W
B6-6
SCALE 3X, 4 PL



SECTION X-X
B4-6
SCALE 3X, 4 PL

77725

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DESIGN		DART AEROSPACE USA, INC.	
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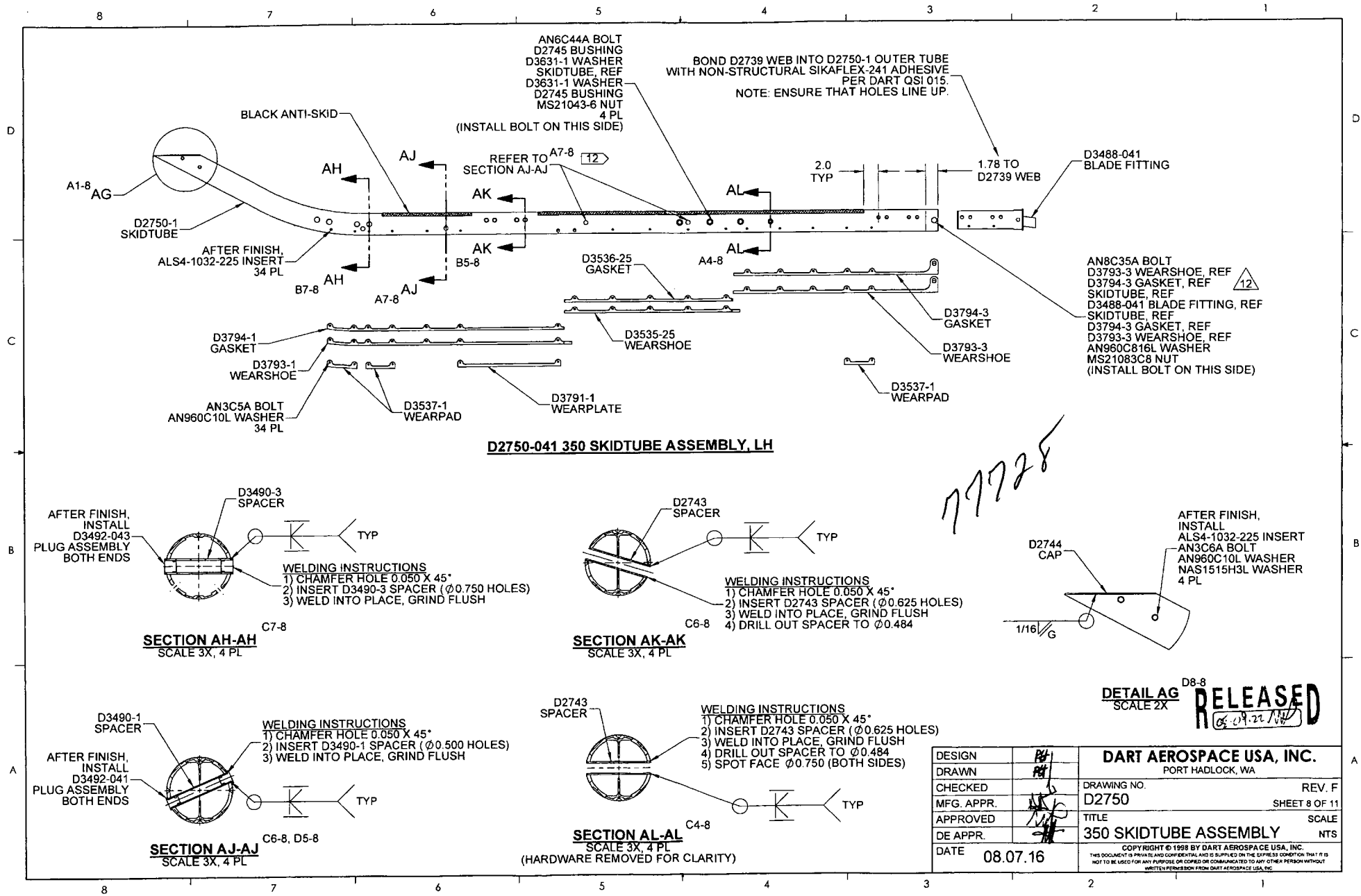
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

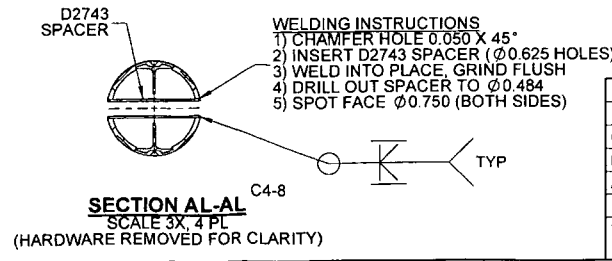
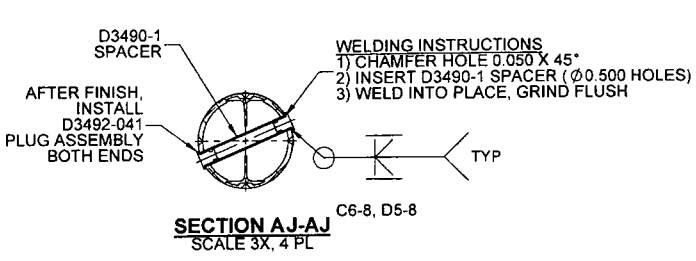
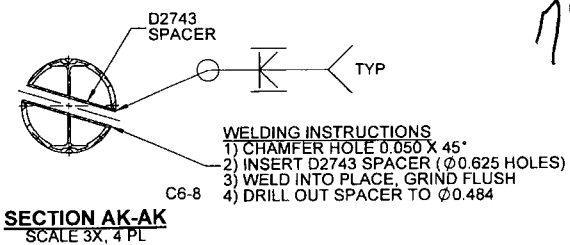
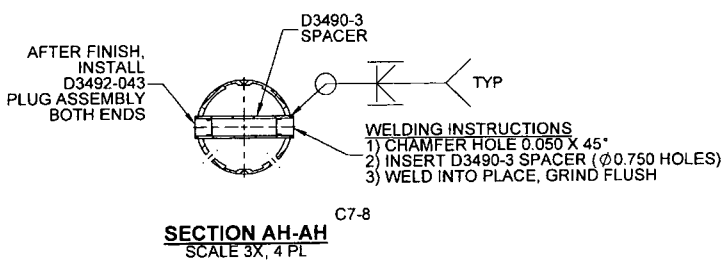
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2750-041 350 SKIDTUBE ASSEMBLY, LH

77728



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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

C

B

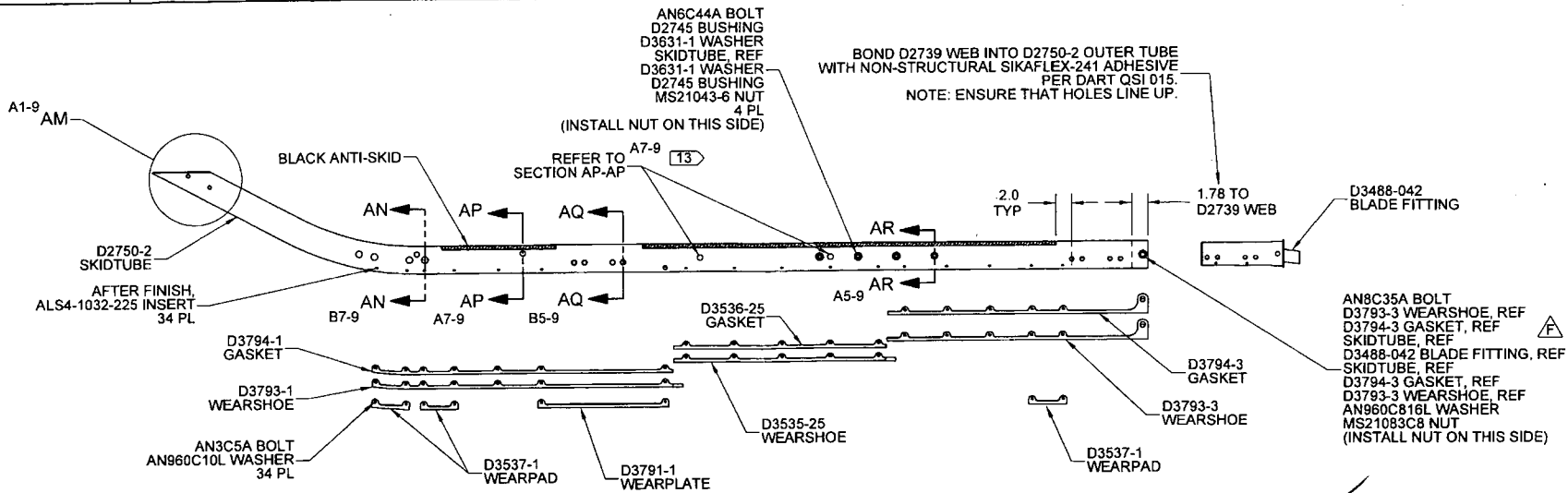
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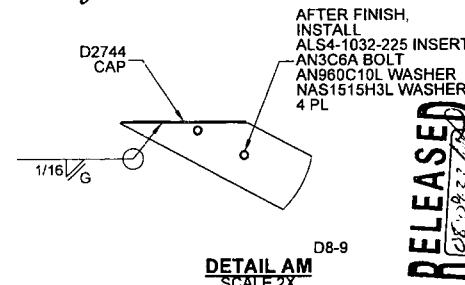
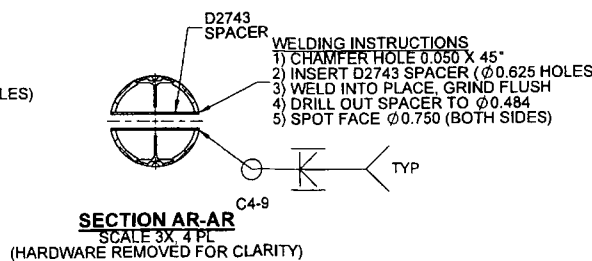
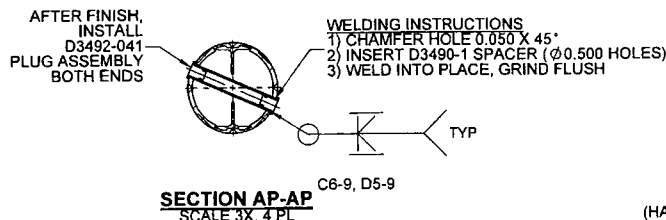
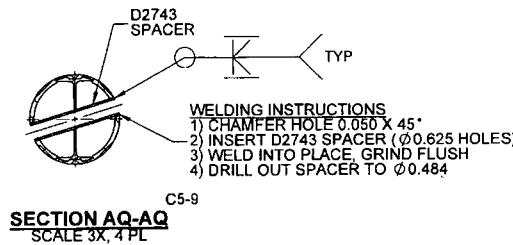
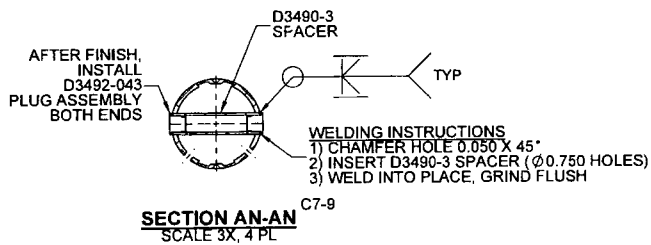
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B

A



D2750-042 350 SKIDTUBE ASSEMBLY, RH



DESIGN	PA	DART AEROSPACE USA, INC.	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 9 OF 11
APPROVED	PA	TITLE	SCALE
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080922/88

77225

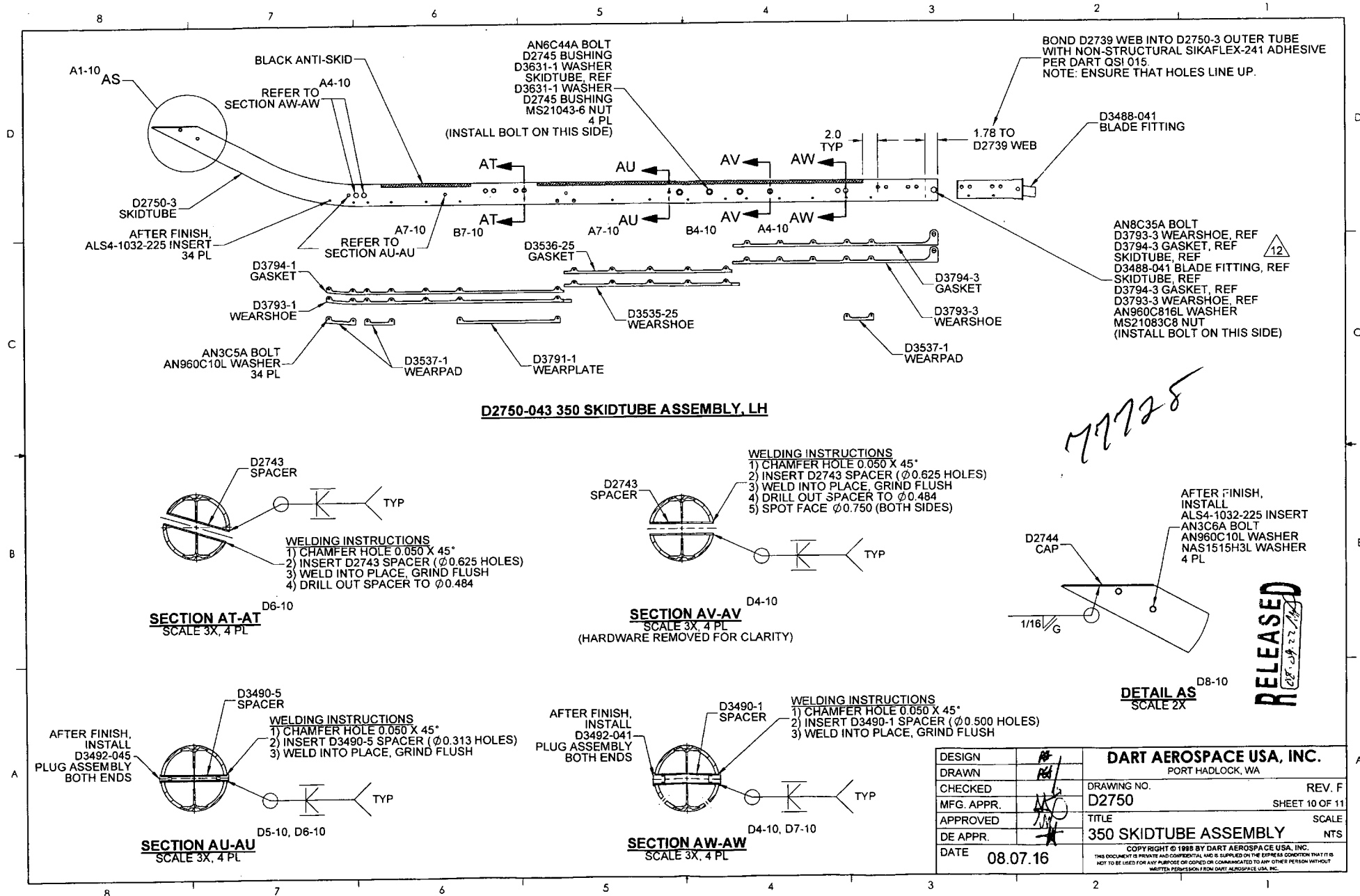
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

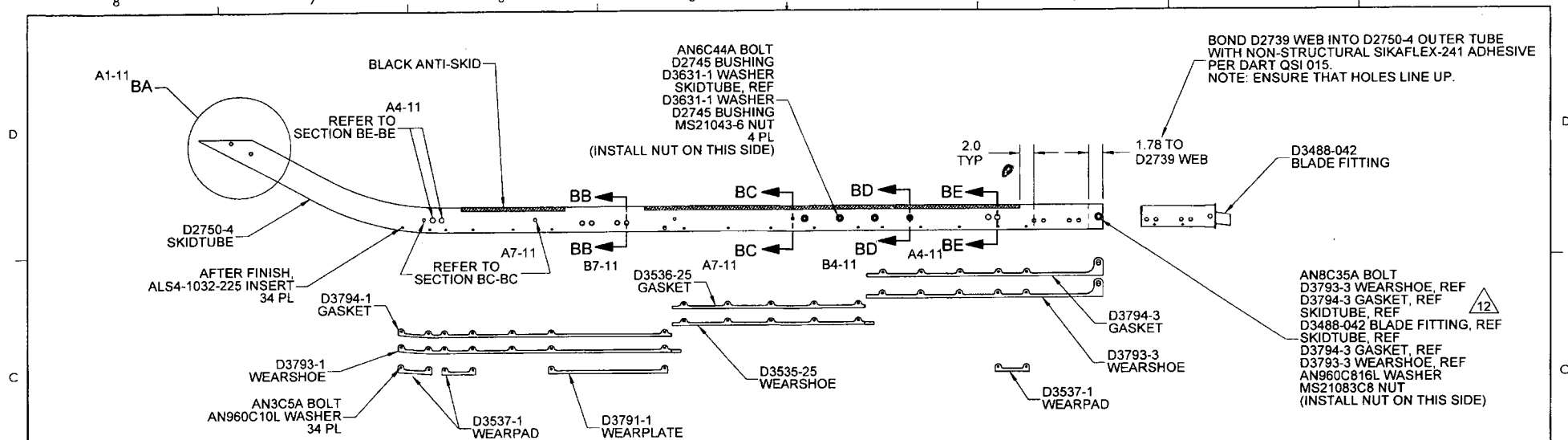
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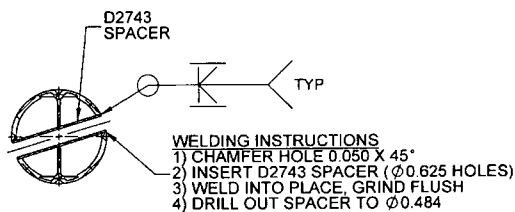
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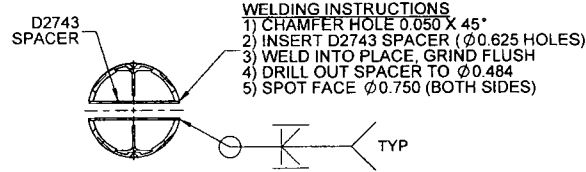
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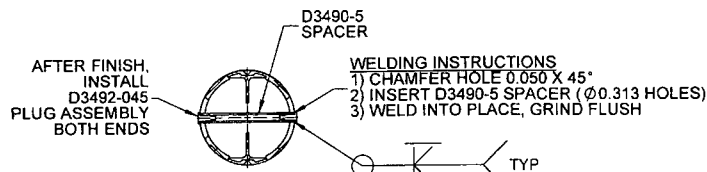
D2750-044 350 SKIDTUBE ASSEMBLY, RH



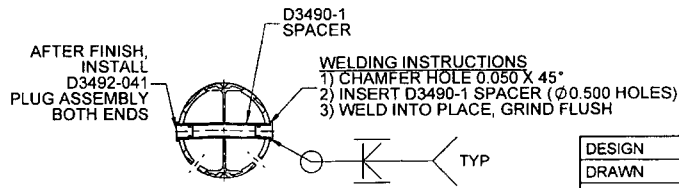
SECTION BB-BB
SCALE 3X, 4 PL



SECTION BD-BD
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

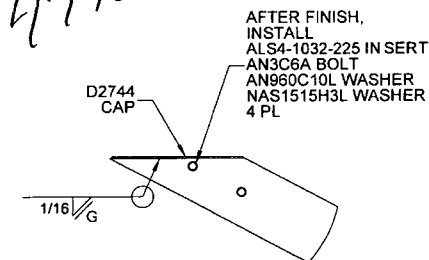


SECTION BC-BC
SCALE 3X, 4 PL



SECTION BE-BE
SCALE 3X, 4 PL

77728
RELEASED
06-07-22 / HP



DETAIL BA
SCALE 2X

DESIGN	HA	DART AEROSPACE USA, INC.	
DRAWN	HA	PORT HADLOCK, WA	
CHECKED	HA	DRAWING NO.	REV. F
MFG. APPR.	HA	D2750	SHEET 11 OF 11
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DE APPR.	HA	350 SKIDTUBE ASSEMBLY	NTS
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8 7 6 5 4 3 2 1

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 279

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 77362
Part number: D 350 636 012
Description: 350 skidsteer
Welding Process: Tig ☒ Mig ☐
Base material: aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐
Undercut: pass ☒ fail ☐
Pin holes: pass ☒ fail ☐
Overlap (cold lap): pass ☒ fail ☐
Porosity (surface): pass ☒ fail ☐
Coloration: pass ☒ fail ☐

Qualifier Pat Jones Date of Test Coupon 11.12.22

Welder Barclay Elliott Date of Test Coupon 11.12.22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld